

1. JP,3043945,U

**\* NOTICES \***

**JPO and NCIPPI are not responsible for any  
damages caused by the use of this translation.**

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

**CLAIMS**

---

[Utility model registration claim]

[Claim 1] The small snowblower characterized by being constituted so that it may have the shaft to which it was attached in a frame, the wheel of the pair attached in the posterior part of a frame, and the anterior part of a frame pivotable, and two or more snow removal wings were fixed, and the motor which supplies the driving force which rotates a shaft and snow may be dispersed in the method of the right rear, or the method of the left rear.

---

[Translation done.]

**\* NOTICES \***

**JPO and NCIP are not responsible for any damages caused by the use of this translation.**

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

**DETAILED DESCRIPTION**

---

[Detailed explanation of a design]

[0001]

[The technical field to which a design belongs]

This design is related with the small snowblower which has the snow removal capacity excellent in the pony force, even if handling is easy and is the case that snow coverage height is high.

[0002]

[Problem(s) to be Solved by the Device]

In the snow coverage ground, how the snow which lay is processed poses an important problem. Especially, snow coverage processing at home is shown as one technical problem with the aging and fraction-izing of a household constituent in recent years. Since the snow is removed from a service road for daily living by the self-governing body etc. in the early morning, the actual condition of snow coverage processing at home is requiring an effort with a snow removal lump very big although a door [ of each home ] and car-barn front's is taken up and the snow removal lump in front of the door or a car barn is removed.

[0003]

As a facility which performs snow coverage processing at a home, there are a thaw tub, road heating, various snowblowers, etc., and these facilities are spreading gradually. However, it is not easy to remove the above snow removal lumps in a thaw tub or road heating. Moreover, the large-sized snowblower is expensive, and since handling is generally also complicated, it is not common to use at home. Furthermore, it has the fault of a small snowblower not having enough snow removal capacity, and receiving a limit of a certain extent according to snow coverage height, snow quality, etc.

[0004]

Therefore, this design aims at offering the small snowblower which has the snow removal capacity which was excellent even if it was the case easy [ handling ] and cheap that snow coverage height was high.

[0005]

[Means for Solving the Problem]

A small snowblower according to claim 1 is equipped with the shaft to which it was attached in a frame, the wheel of the pair attached in the posterior part of a frame, and the anterior part of a frame pivotable, and two or more snow removal wings were fixed, and the motor which supplies the driving force which rotates a shaft, and is characterized by being constituted so that snow may be dispersed in the method of the right rear, or the method of the left rear.

[0006]

[The gestalt of implementation of a design]

Next, the gestalt of operation of this design is explained to a detail with reference to a drawing. The small snowblower concerning the gestalt of one operation of this design shown by the reference mark 10 as a whole in drawing 1 has the frame 12 which forms the body of a snowblower. Lower limit section 12a of a frame 12 is a camber preferably. A frame 12 may be formed with crest die steel, or may be formed by pipe material.

[0007]

The wheel 14 of a pair is attached in the posterior part of a frame 12 pivotable. The wheel 14 is preferably made from rubber. In addition, preferably, as shown in drawing 1, the wheel 14 is attached so that the touch-down section may serve as the same height as lower limit section 12a of a frame 12.

[0008]

The shaft 16 is attached in the anterior part of a frame 12 pivotable, and three snow removal wings 18 separate 120-degree spacing at a shaft 16 mutually, and are being fixed to it. Tip 18a of each snow removal

wing 18 is serrate so that hard snow can also be scratched easily preferably. Moreover, the snow removal wing covering 20 is attached above the snow removal wing 18. In addition, in this specification, the "anterior part" of a frame 12 or the "front" means the travelling direction of a snowblower, and the "posterior part" of a frame 12 or "back" means the side in which the operator of the travelling direction of a snowblower and an opposite direction, i.e., a snowblower, is.

[0009]

The motor 22 is installed in the center of abbreviation of a frame 12. The pulley 24 is being fixed to revolving-shaft 22a of a motor 22, and it is built over the belt 28 shown with a broken line in drawing 2 between the pulleys 26 currently fixed to the end of a shaft 16. Thereby, if a motor 22 is made to drive, rotation driving force will be transmitted to a shaft 16 through a belt 28, and the snow removal wing 18 will rotate. In addition, in drawing 1, the snow removal wing covering 20 and a motor 22 are not shown for simplification of a drawing.

[0010]

The actuation arm 30 is attached in the both sides of a frame 12, and the grasping member 32 which the operator of a snowblower grasps is attached at the tip of the actuation arm 30. In the center of abbreviation of the grasping member 32, as shown in drawing 2, the switching and balancing box 34 for making a motor 22 drive is arranged. The code support arm 38 which supports the code 36 (drawing 2 is shown by the broken line) which supplies electric power to a motor 22 is attached in the edge of a switching and balancing box 34. The code support arm 38 is attached so that 90 degrees can circle to the method of the right, or a left, in order to remove a code 36 from a snow-removal work side to the side preferably, as drawing 2 is shown by the alternate long and short dash line.

[0011]

Moreover, behind the snow removal wing 18, as shown in drawing 3, in order to adjust a snow plowing direction, the deflector 40 is attached rotatable at the frame 12. Thereby, as the alternate long and short dash line of drawing 3 shows a deflector 40, a snow plowing direction can be adjusted to the method of the right rear, or the method of the left rear by fixing so that the include angle of 30 degrees may be made to the method of the right rear, or the method of the left rear.

[0012]

Actuation of the small snowblower 10 of this design constituted as mentioned above is explained. A motor 22 is made to drive and the snow removal wing 18 is rotated in the direction shown by the arrow head A of drawing 1. Subsequently, the grasping member 32 is grasped and the small snowblower 10 is pushed to the location which is going to remove the snow. Then, the snow which snow scratches by the snow removal wing 18, is taken, and was scratched is flown behind the small snowblower 10, as shown by the arrow head B of drawing 2. Furthermore, as shown by the arrow head C of drawing 3, it is flown by the deflector 40 in the back side.

Under the present circumstances, the operator of the small snowblower 10 is good to be located in the left-hand side or right-hand side of the grasping member 32 so that the snow flown may not be hit. Moreover, a code 36 can be prevented from being involved in the small snowblower 10 by making it circle in the code support arm 38 according to the situation of snow-removal work. Moreover, according to the situation of a snow surface, the small snowblower 10 can be smoothly moved by using the camber and wheel 14 of lower limit section 12a of a frame 12 properly. In addition, when snow coverage height is low, hard flow can be made to be able to rotate the snow removal wing 18, and snow can also be flown ahead of the small snowblower 10.

[0013]

[Effect of the Device]

According to this design, since the snow can be removed from a snow coverage lump's lower part as snow is scratched and taken, even if it is the case that snow coverage height is high, it becomes possible to perform snow-removal work effectively.

---

[Translation done.]

## \* NOTICES \*

JPO and NCIP are not responsible for any damages caused by the use of this translation.

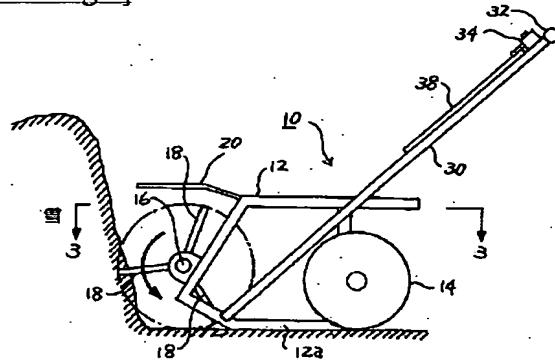
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

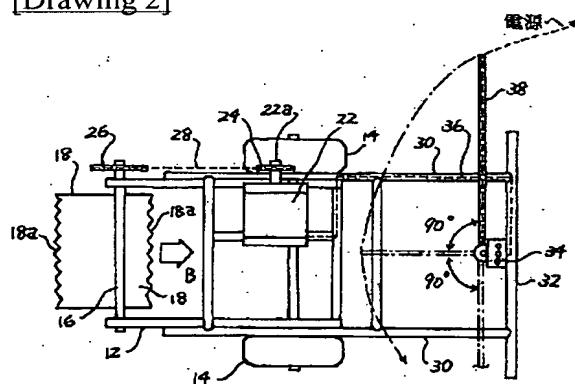
DRAWINGS

---

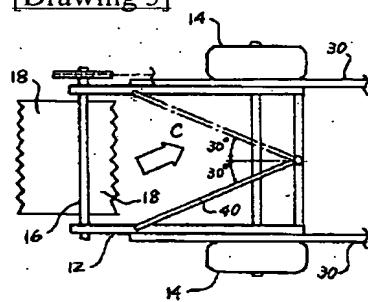
## [Drawing 1]



## [Drawing 2]



## [Drawing 3]



---

[Translation done.]